



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,702	01/21/2004	Evan E. Koslow	KT-P-028US	5209

7590 05/12/2006

Shirley S. Ma  
KX INDUSTRIES, L.P.  
269 S. Lambert Road  
Orange, CT 06477

EXAMINER
----------

DRODGE, JOSEPH W

ART UNIT	PAPER NUMBER
----------	--------------

1723

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/762,702

Applicant(s)

KOSLOW ET AL.

Examiner

Joseph W. Drodge

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the filter, filter components, dispenser and filter housing must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claims 8-11 and 17-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use

Art Unit: 1723

the invention. The instant Specification is completely silent as to details or relative configuration of the claimed filter, filter components, housing and dispenser and their structural relationships to the valve and pressure regulator of the claimed apparatus.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3,5,7 and 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Knop et al patent 5,921,275.

For independent claims 1 and 12 and also claim 13, Knop discloses means for regulating flow (pressure regulating means) 24 (see column 3, lines 53-54), and a valve component 40 comprising a chamber 30 having inlet 32 and outlet 14, a means or pressure sensing surface 46 for sensing pressure that is downstream of inlet and means for preventing transmission of elevated pressure, so as to block the inlet to the chamber or flow therethrough (column 3, line 65-column 4, line 9).

Claim 2 is deemed not further limiting since blocking of chamber inlet is already in claim 1 and no downstream components which have a burst or fatigue life are claimed.

For claims 3,5 and 29, see piston or piston-like member 38 or 40, shut off tip adjacent diaphragm 34 (column 4, lines 4-5), shaft, and pressure-actuating surface responsive to pressure rises to shut off flow through the chamber inlet (column 4, lines 5-10 and lines 20-24) and also see spring means 44.

For claim 7, the means for regulating is upstream from the chamber.

For claim 14, a narrow target flow rate is achieved to prevent cavitation (column 3, lines 53-54).

For claim 15, see floating O-ring or equivalent to maintain target flow rate 52 (column 4, lines 31-42).

For claim 16, isolation of components is achieved upon sensing of lowering pressure by the pressure-actuating surface.

Claims 1-3,5,7 and 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanner et al PG PUBS Document US2004/0129617.

For independent claims 1 and 12 and also claim 13, Tanner discloses means for regulating flow (pressure regulating means) 39 (paragraph 122 of page 7), and a valve component 92 comprising a chamber 34 having inlet 102,104 and outlet 106,108, a means or pressure sensing surface for sensing pressure (paragraph 115 of page 7) that is downstream of inlet and means for preventing transmission of elevated pressure, so as to block the inlet to the chamber or flow therethrough.

Claim 2 is deemed not further limiting since blocking of chamber inlet is already in claim 1 and no downstream components which have a burst or fatigue life are claimed.

Art Unit: 1723

For claims 3,5 and 29, see piston or piston-like member (lines 4-7 of paragraph 115), shut off tip, shaft, pressure-actuating surface responsive to pressure rises to shut off flow through the chamber inlet and also see spring means.

For claim 7, the means for regulating is downstream from the chamber.

For claim 14, a narrow target flow rate is achieved so as to control residence time through a filter in the device (paragraph 27 in addition to paragraph 115).

For claim 15, see floating O-ring or equivalent to maintain target flow rate (paragraph 122 concerns a "flow washer" of flexible material).

For claim 16, isolation of components is achieved upon sensing of lowering pressure by the pressure-actuating surface (paragraph 115 states that flow through the device is stopped).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knop et al or Tanner et al in view of Miller et al patent 6,517,615.

Claims 4 and 6 differ from Knop or Tanner in requiring the inlet of the valve chamber to include a nozzle and the shaft extending from the shut-off tip to have a flow-through core. However, Miller et al teach such nozzle-like member at and a piston shaft of a flow control valve having a flow-through core, in an arrangement for controlling pressures in a filtering system.

Claims 8-11 and 17-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knop et al in view of one or more of Fritze PGPUBS Document US2005/0103721 (based on 9/23/2003 filing date of the provisional) and Clack et al patent 5,460,719.

Claims 8-11 and 17-29 all differ in requiring there being a filter or filter system downstream of the valve, claims 27-29 additionally in requiring such filter to have a

Art Unit: 1723

diffusive filtration medium and burst and fatigue life requirements. Knop does disclose the valve and pressure regulating device being upstream of an appliance such as the icemaker of a refrigerator (column 3, lines 46-52) [as in claims 10 and 24]. Each of Clack et al and Fritz teach refrigerator and freezer or ice-making appliances having filtering systems and accompanying pressure regulating mechanisms and valves upstream of such filters (see Clack et al beginning at column 43, lines 34-39 and column 10, lines 30-43) and Fritze at paragraph 20). It would have been obvious to one of ordinary skill in the art to have installed such downstream filter of Clack et al or Fritze in the Knop system, to provide clean, sterile ice or cooled water to consumers, without risking hazardous water leaks in the refrigerator or other appliance to filter system or fluid handling components exceeding burst or fatigue requirements.

For claims 9,19 and 27, each of Clack at column 11, lines 23-25 and Fritz at paragraphs 20 and 22 suggest need to minimize pressure fluctuations of water into the filter system such as by including a pressure regulator , inherently to reduce risk of burst or fatigue of filter or plumbing components.

For claims 11 and 25, Clack at column 10, line 42 and Fritz at paragraph 25 also teach filtered water being dispensed.

For claims 20,21,27 and 28, the filter components of Clack and Fritz are inherently diffusive mediums to remove a wide range of water contaminants since they may comprise activated charcoal or similar materials (column 6, lines 22-49 of Clack or paragraph 14 of Fritz).



Art Unit: 1723

For claim 22 concerning maximum pressures allowed, see Clack at column 11, line 24, or Fritz at paragraph 20.

For claim 23, see single housing 12,22 of Knop for valve and means for regulating.

For claim 24, the refrigerator of the respective references constitutes an appliance.

Claim 26 is not considered further limiting since no structure is claimed to accomplish the recited function of touching or actuating a dispenser.

For claim 29, in particular, Knop suggests valve of the type having piston, shut-off tip, shaft and pressure regulating surface (column 3, line 65-column 4, line 9).

Art Unit: 1723

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached at 571-272-1151. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

May 10, 2006

  
JOSEPH DRODGE  
PRIMARY EXAMINER